

JUN 30 1902



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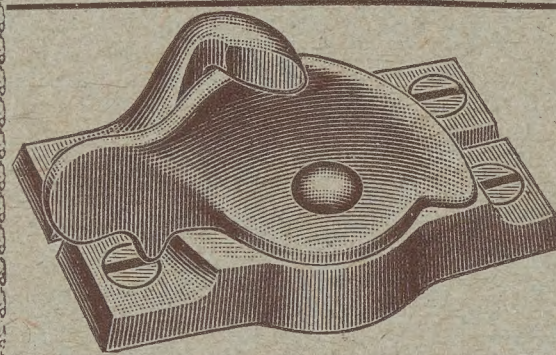
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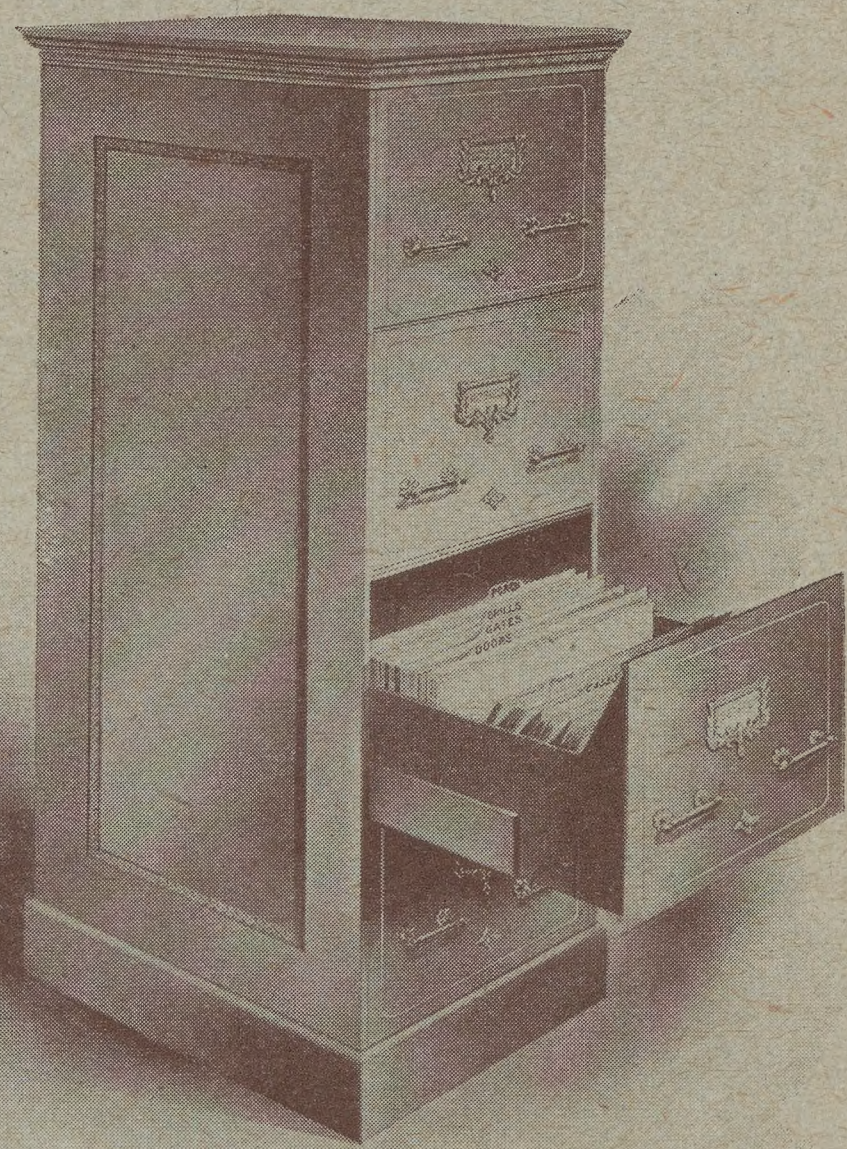
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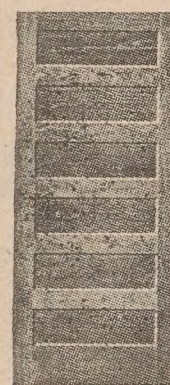
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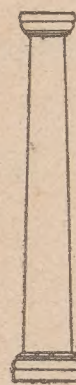
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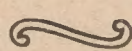
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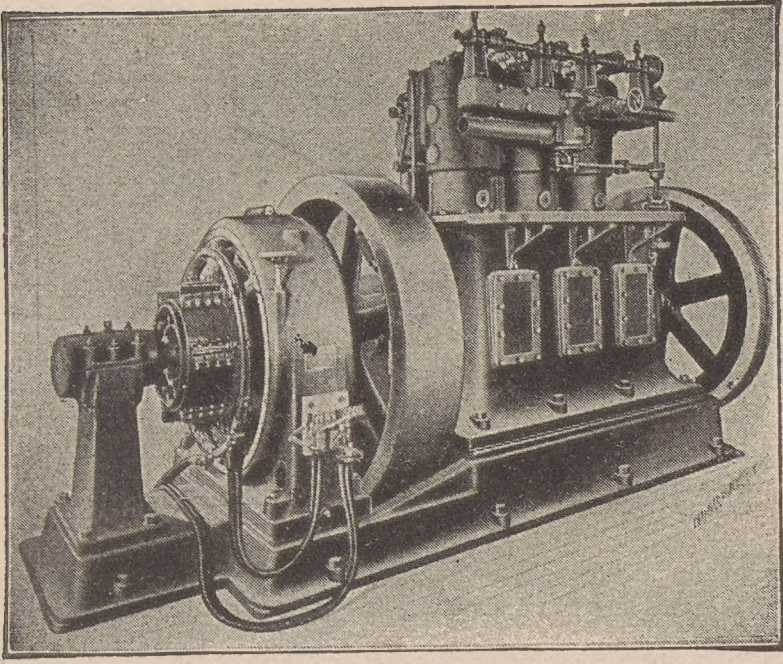
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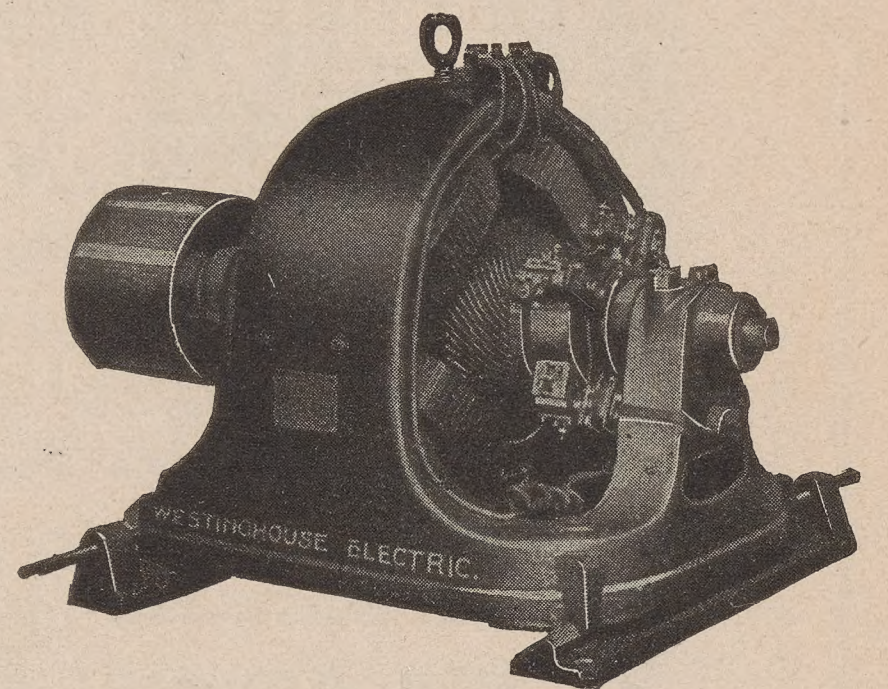
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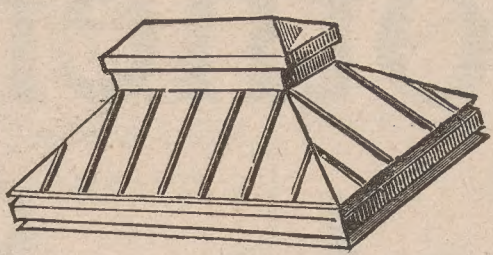
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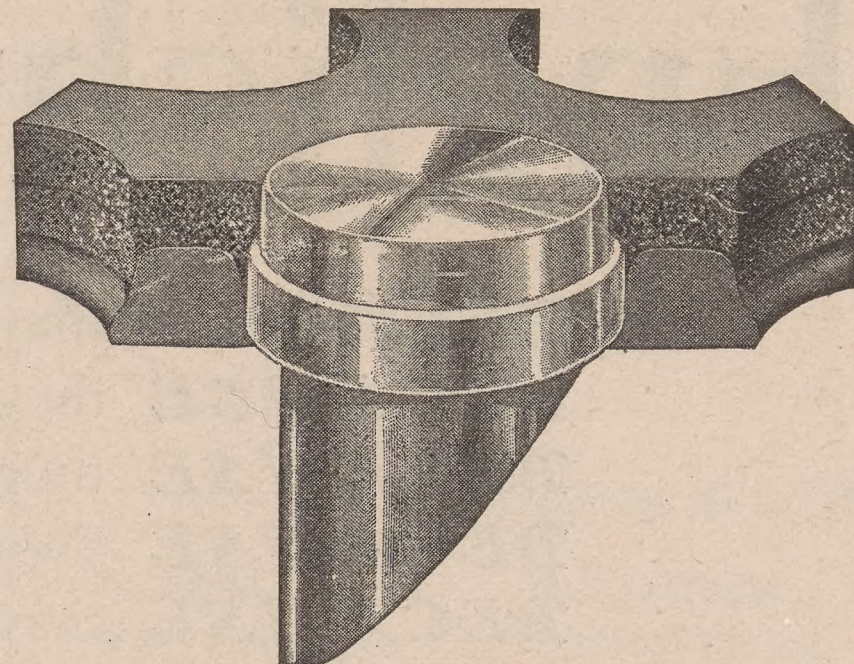
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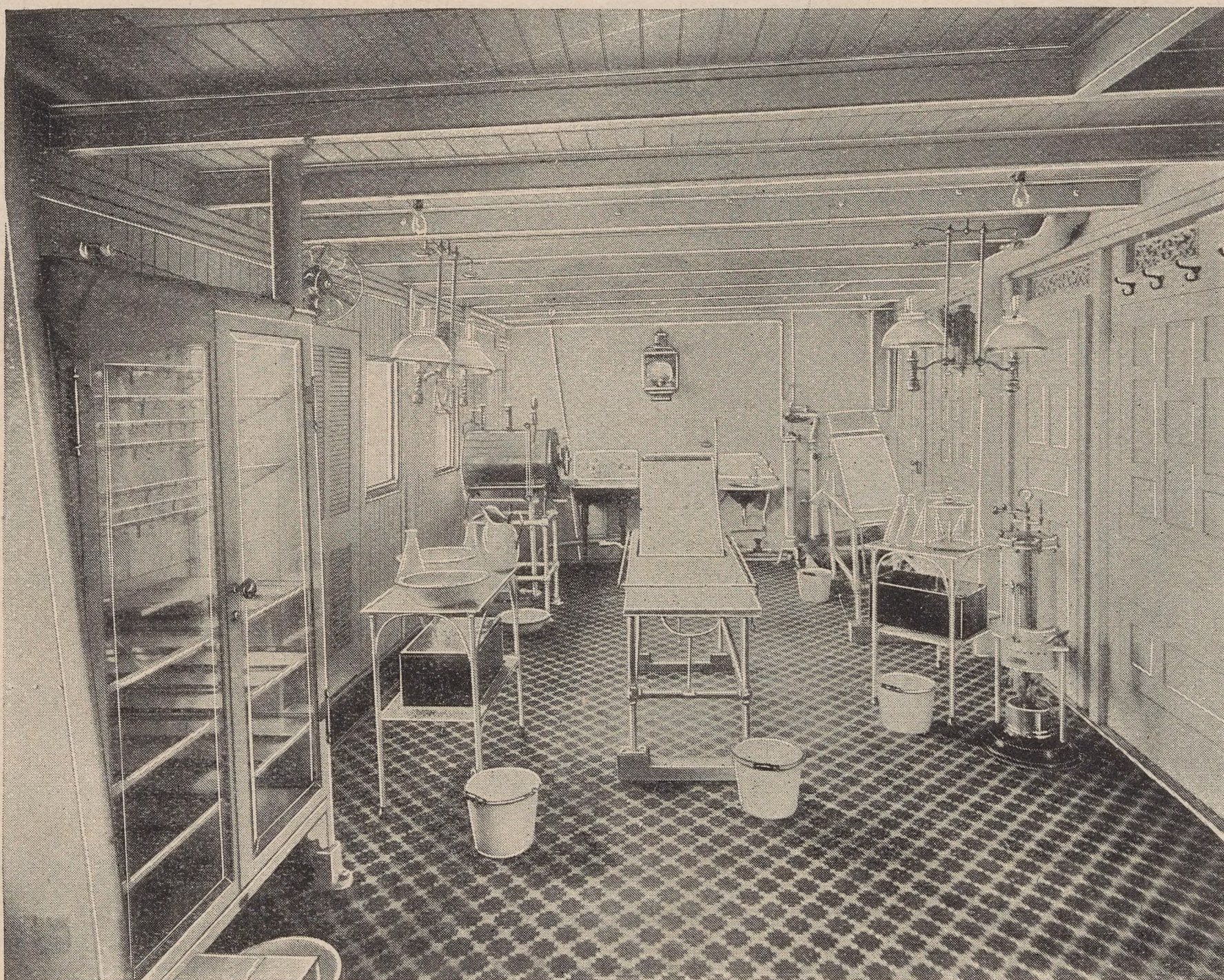
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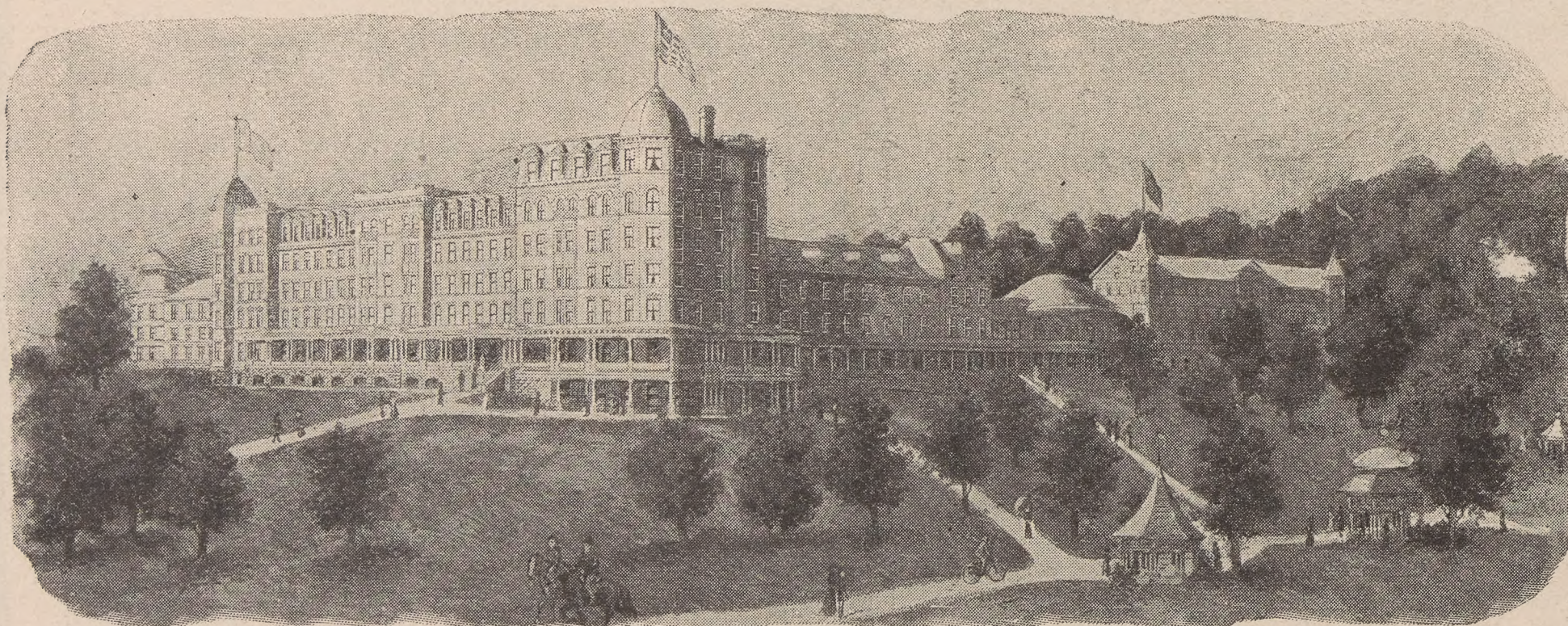
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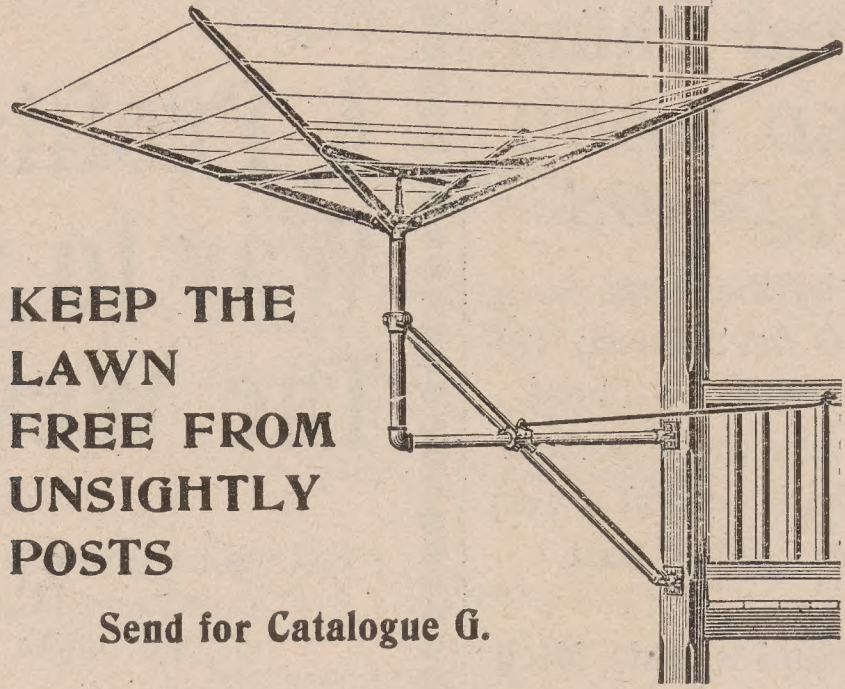
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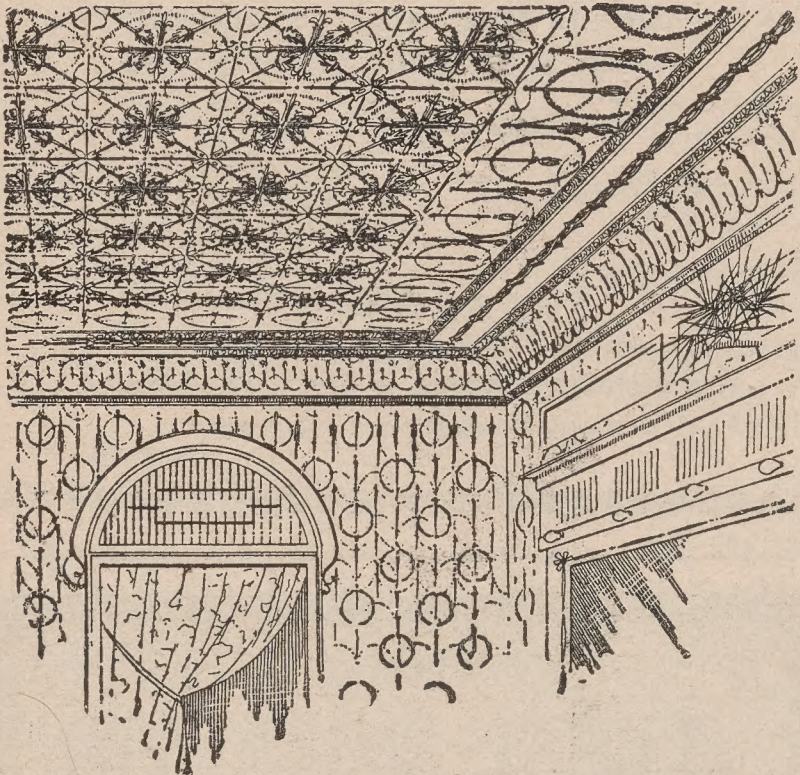
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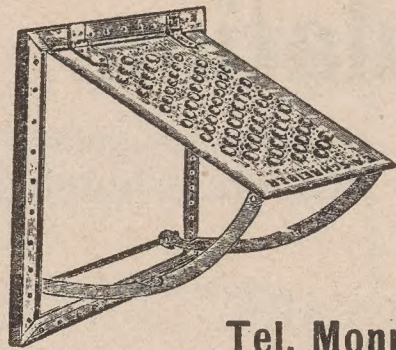


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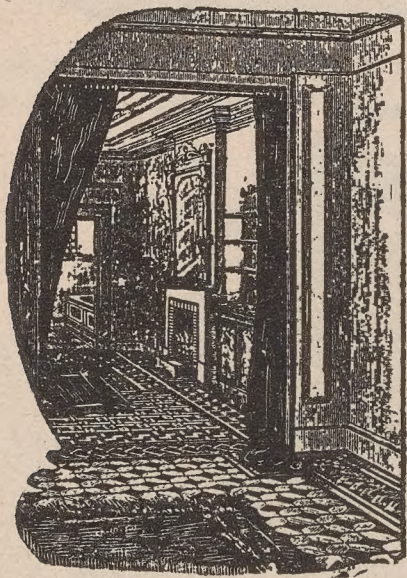
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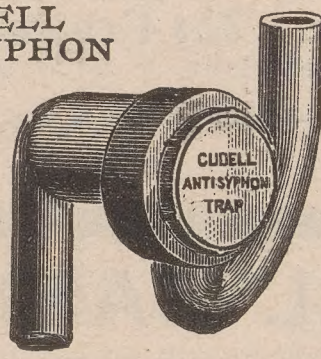
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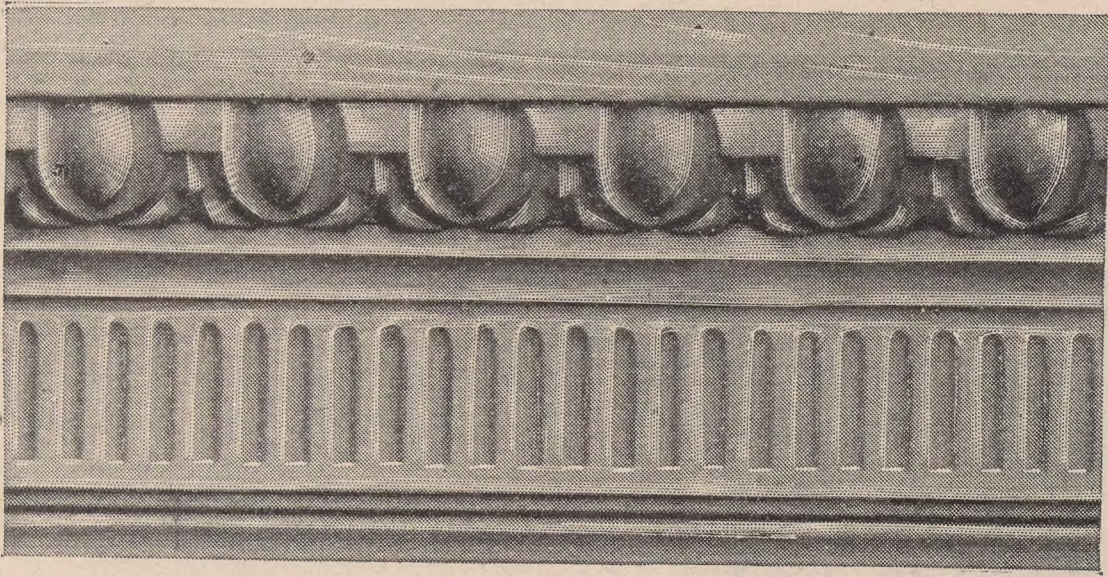
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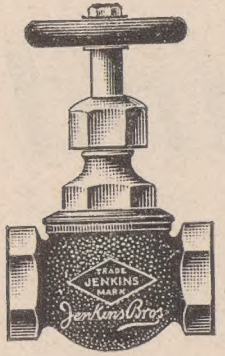
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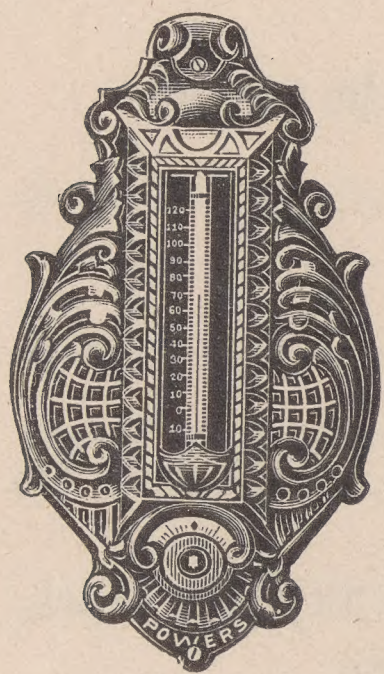


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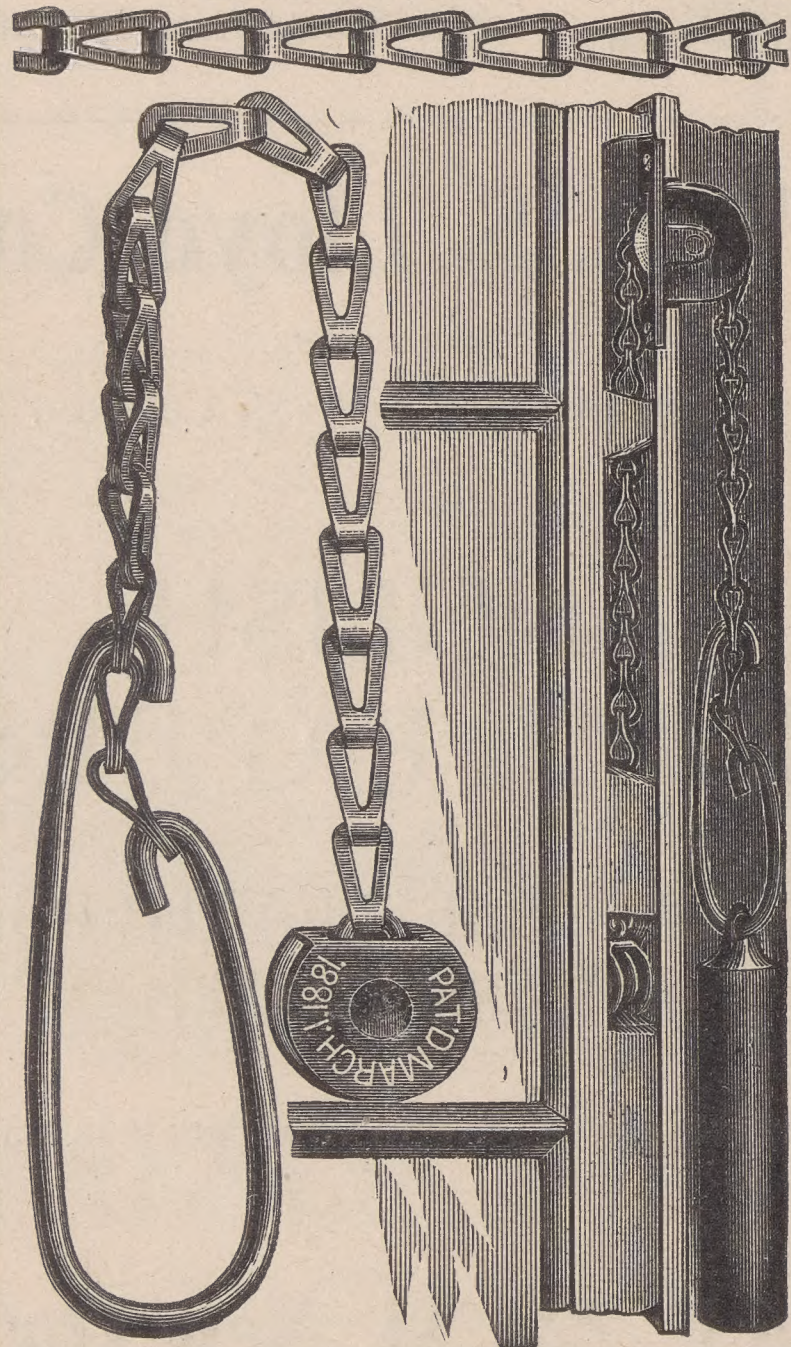
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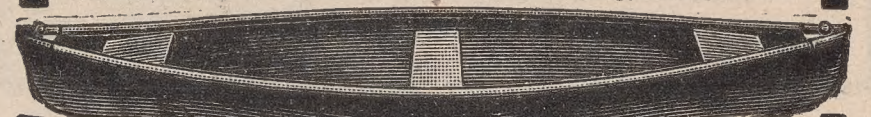
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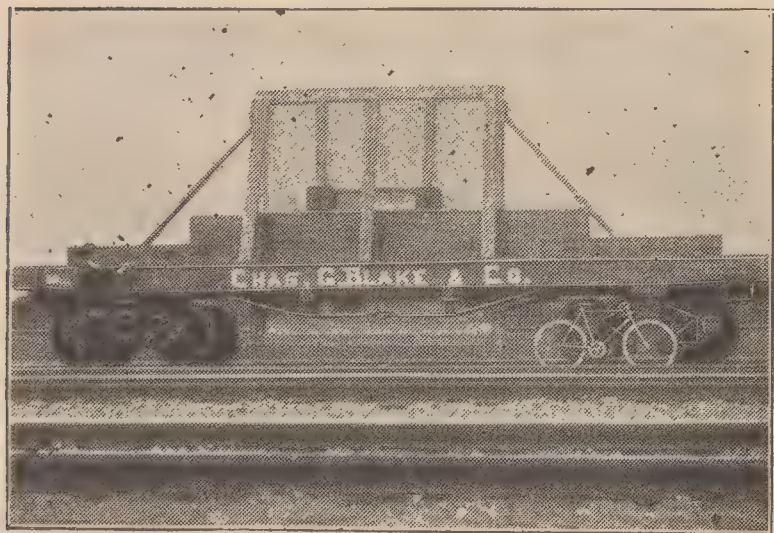
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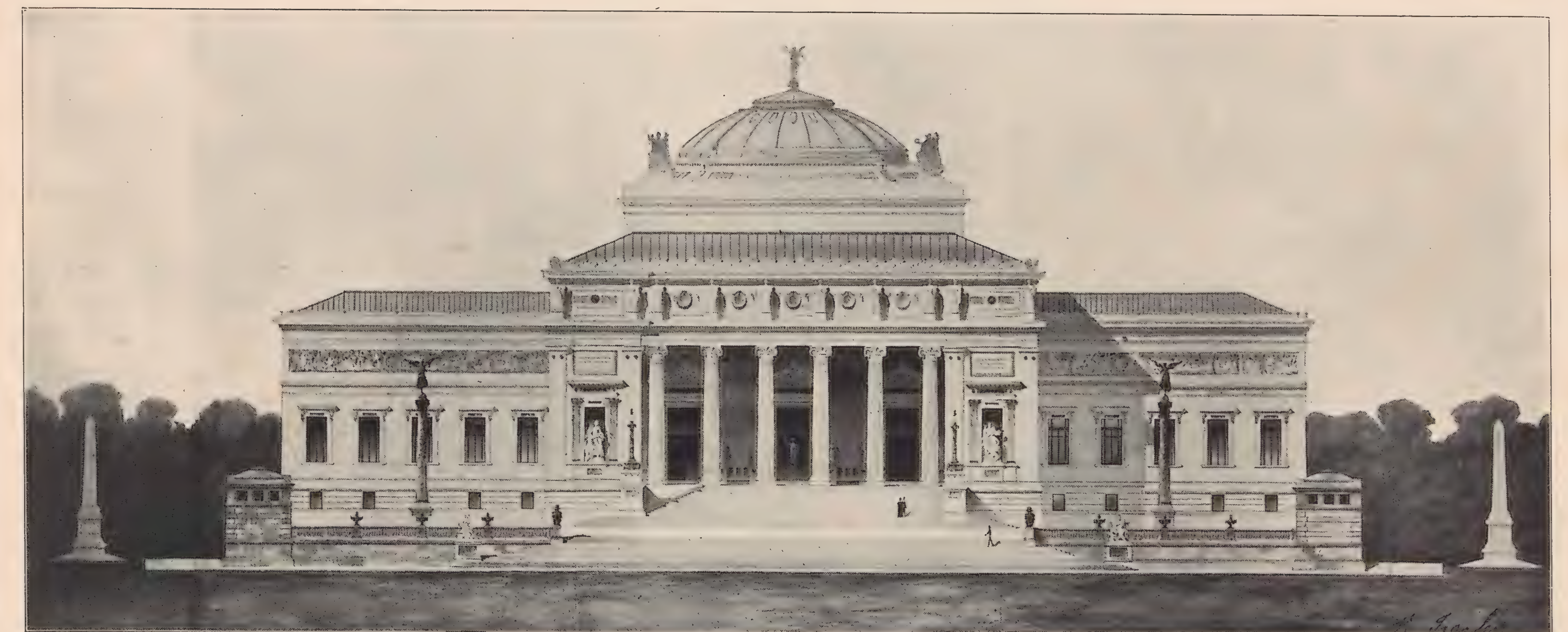
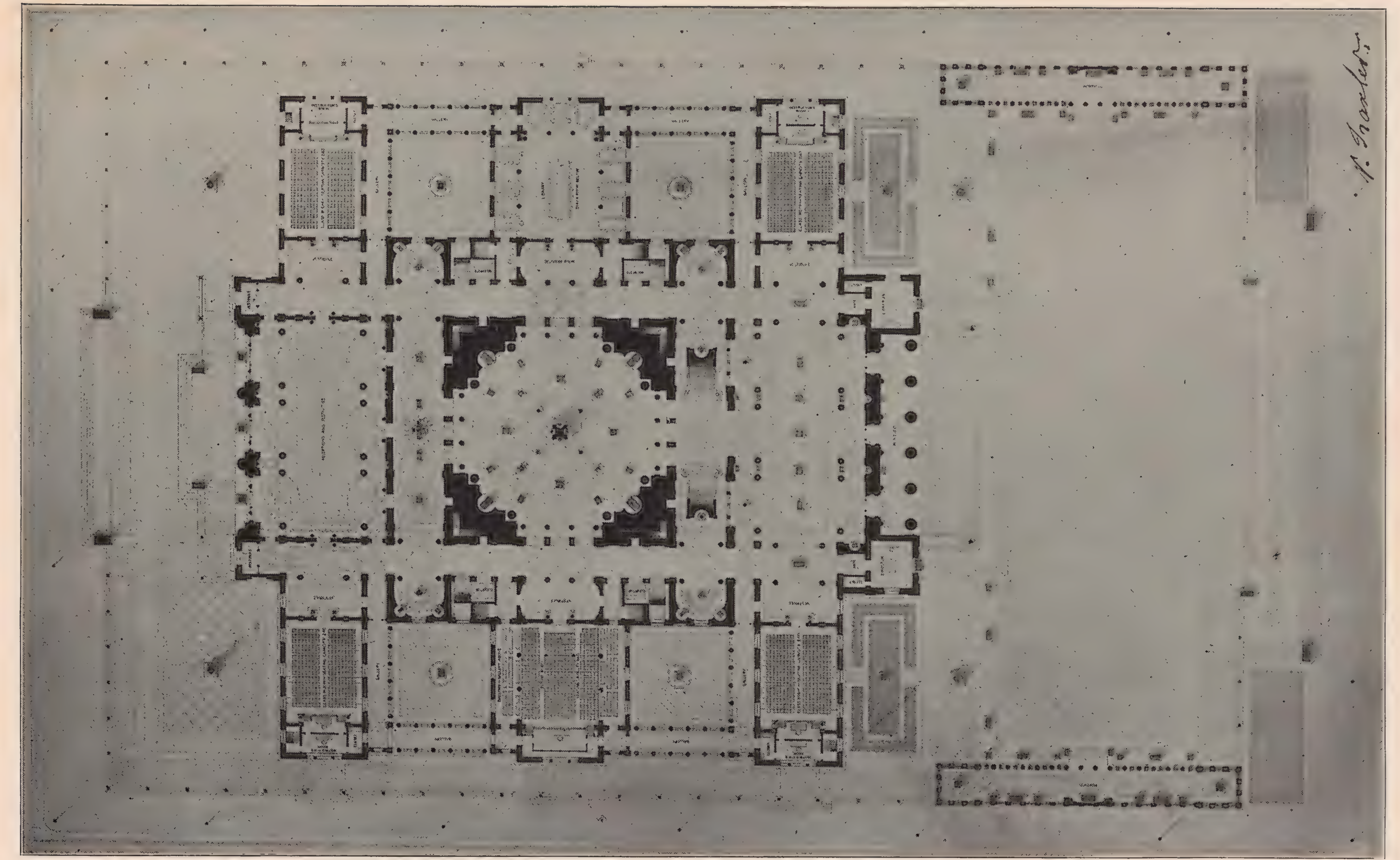


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NEXT CONVENTION AT ST. LOUIS, MO., OCTOBER 12-13, 1903.

The Fourth Convention of the A. L. A.

The fourth convention of the Architectural League of America, which was held at Toronto, Canada, on May 29, 30 and 31, was principally notable for the educational trend of the papers read and their general discussion. There is a vitality and virility about the work and purposes of this organization representing the younger men in the profession that is full of promise for the future of architecture. They are fearless and enthusiastic, and no problem is too large or the results too problematical for these energetic minds to discuss. And their work gives promise of more or less immediate results. The influence of the Architectural Club is already felt in the entire field of municipal and civic art in every city in which such exist, and not only do they give intelligent aid but often supply the initial force in the direction of those things that tend to make a city beautiful and add to its comfort and health. When the Architectural League of America was organized at Cleveland four years ago, the matter of municipal improvement had received but scant attention, but it became at once one of the main objects of the league's activity, and up to the present time the progress among the municipalities has been most remarkable. Its work is full of virility, and though it will make mistakes and often present an advanced thought that will not be readily supported, it will be worth while because of the educational effect it will have upon the profession and the public as well. There were gathered at this convention delegates from St. Louis on the West to Boston on the East, and each delegate represented and gave to the convention the best thought of his organization, and so thorough is the system by which the league keeps in touch with its integral parts that those subjects in which it is most interested have received thorough study by the home club before they come before the league for definite action. It is even now the strongest, most active force in the field of things artistic, and composed as it is of the younger architects, and drawing support and counsel from those in the allied arts, with nothing of prejudice and a strong spirit for progression, its destiny is well marked, for it only requires the conservatism that will come with experience to make it a lasting and beneficial force in the art progress of the country.

Death of James B. Lord, Architect.

James Brown Lord, of New York, an architect of more than local reputation, though his best-known works are in that city, died on June 1. Mr. Lord's most notable work is perhaps the white marble building for the Appellate Division of the Supreme Court, on Madison Square, East. The monument to Chester A. Arthur was also designed by him. His latest work was the preparation of plans for the first of the Carnegie libraries to be built in New York, that to be located on East Seventy-ninth street. A regrettable incident to Mr. Lord's death was the refusal of a judge to prohibit the blasting going on in the next lot to his residence during his dying hours. Mr. Lord was a member of the American Institute of Architects and many other societies.

THE ARCHITECTS.

BY F. W. FITZPATRICK.

THE writer of a recent magazine article, entitled "The Profession of Architecture," glowingly describes the fat fees taken in by that profession, its high standing in the community, the great erudition of its practitioners, etc. The entire article is virtually a most fragrant and highly colored bouquet, tied up in pink and baby-blue ribbon, and handed over the foot-lights by—I imagine him to be—an admiring and enthusiastic layman. Many such articles that I have seen of late in magazines and newspapers, aided and abetted by lectures and technical school prospectuses, tend to create an entirely wrong idea of the profession, its emoluments, its duties and its status.

Now, dear reader, do you wish to come behind the scenes and peek at architecture as she really is, without the glare of calciums and blare of the bass-drum? A glimpse behind the scenes, you know, often disillusionizes the glimpser, but it makes him more critical, he expects more thereafter, and, perhaps, that in turn may lead up to better acting on the part of the actors, who, after all, gauge their work up or down to the standard established by that criticism.

In the first place, who are we architects, anyway? Who or what gives us that title, and when and where did we get it?

What follows will indirectly but fully answer the query. It makes a good opening or text to begin with, so we will let it stand.

When I was a boy, an architect was a somebody—a superior person. There was much mystery about his work; his word was law; the client was a small part of the performance. The architect designed his building and made a set of plans; his students, or "clarks," made a couple of copies, wonderfully and painfully rendered. He wrote a treatise called a specification, and other "clarks" wrote off a couple of copies therefrom. Then he visited the building in solemn state once a week or so and collected his five per cent fee. He bothered not his head about the plumbing, the heating or any of the other few and primitive accessories there were then. Those things were attended to by specialists with whom he had nothing to do. He ranked with the judge, the leading lawyer, the eminent physician—several pegs higher in the social rack than the merely successful merchant or broker, and there was a bottomless chasm between him and the lowly builder or contractor.

He had studied and worked in the successive stages of apprenticeship, student, "clark" and assistant in some office for a dozen or more years, and had probably traveled some, perhaps even to the Far East. There were no more preliminary fastings and prayers for him to go through in those times than there are now before his "admission" to the full honors of the craft. Ours has ever been an open profession—wide open. When he got ready he went in, and that is all there was about it. And so it is to-day, only more so, for then few men entered the ranks or received many commissions who were not pretty well trained. It was not so popular a profession as it has grown to be of late. Yes, sometimes he competed for his work—it has always been the fashion—but he did so in a dignified way. But of competitions more anon.

Later his duties became more complex. He took in the plumbing and other frills, his plans comprehended all there was about a building. Competition among builders grew more keen. He had to have more plans and specifications. Inventions of copying processes and the typewriter came to his aid, and he turned out copies of his work by the dozen—yes, by the hundred. He became more of an executive and less of an artist. The era of steel construction came in. At first he worked with an engineer; then he absorbed the latter and employed him. So many things were involved in architecture that he had to be satisfied with looking after the merest generalities, leaving all the details to his "subs." Later he actually forgot all about detail. Many even of our leading architects to-day could not design a cow-barn half decently, and as for the art of drawing, many could not earn a dollar a day at it.

Your architect has become a business man, pure and simple. Competition in his line has become, as in all else not yet in the trust, so very keen that there is no fun in it. He has to belong to boards of trade, coax the ward and other bosses, run with the machine, promote enterprises that need the construction of big

buildings, be diplomatic and politic, work his friends and his wife's relatives, and pull the social strings for all they are worth, and get his commissions by any means that a rather elastic, really business conscience may deem legitimate other than upon his merit as a designer, a skilled worker in the mistress, the grandest of all the fine arts.

He is and perforce, essentially a business man. I repeat, architecture is not any longer an art or even a profession; it is a business and is handled upon strictly commercial lines.

Of course, there are still master minds, comparatively great artists in our ranks, and some of them are leading architects. A very few are the "whole thing" in their offices and practice under their own names and alone, but they are so few as not to affect the proposition in the least that the really successful architect is a business man. There are many happy combinations of an artist and a commercial-social-expert, strong firms and able, but you will find, in nine cases out of ten, that the business end is the strong one, the senior partner the leading man—the "whole thing," indeed; the other is little better than a chief technical assistant or office man.

But by far the greater number of successful architects employ all their talent. These architects are attracted to the profession from other lines; they were contractors, material men, etc. Some were draftsmen, true, but unfit for the work, incapable of earning a decent living by it, so they "opened an office" of their own.

You see, the two qualifications—that of being artistic and that of being a shrewd business man—are seldom if ever found in the same man. If they are there at all, one or the other is bound to be the more developed and finally extinguish the other. In an office, among a lot of draftsmen, you will find one who is enthusiastic over art; he studies a lot, applies himself, is pushed ahead, for he is valuable and gets as high as \$10 a day. Another realizes he has not the talents of the first but is shrewd enough to keep his eye on the main chance. He wastes no time studying, not he; he gets out among the people, hob-nobs with the contractors, is particularly attentive to the clients of his employer and impresses upon them how very important his services are upon their work. He figures out that with his meager talents he can not become more than a "tracer" or a "detail man" or a superintendent in that office; but he realizes that if he gets a good "job" to start in on he can become his own master and hire just as good talent as that of his confrère or that very same artistic man. So he wiggles around some client of the office where he is at work, or, if over-conscientious, gets his prey on the outside, makes a lot of plans with the assistance of his talented office-mates during their spare time, pays the latter or not, as the case may be, and launches out into practice, the embryo of a successful architect!

Some States have some form or other of license for architects, but it is a farce at best. With us it is not as in law or medicine, or even with dentists, drug clerks or parsons. All these go through some form of examination or receive some sort of permission from some one in authority to ply their "calling." With us, as soon as a man can afford \$3 or more for a sign with the magic word "Architect" upon it, he is thenceforth and forever an architect in fact; he has "called" himself, as it were, and is as much entitled to that honored title as was a Richardson, a Hunt, or an Atwood—in the eyes of the law and of the dear, discriminating public. Any one of you, my readers, male or female, regardless of color or previous conditions of servitude, may put up such a sign, and no one, in most of our States, may say him "nay." In the other States, \$10 or \$20 will change that "nay" to a lengthy and beautifully gotten up parchment saying "yea" in old English script, which parchment, for \$2 more, may be framed and conspicuously hung up in the office to catch still others of the eternally gullible.

You may ask "What becomes of the skilled designer, the artistic one? Is he not bound to come out on top finally?" No, gentle reader, he will not come out on top. He early realizes the futility of bucking against his shrewd brother, so he works for him. He becomes a sort of machine. Disgusted with what he thinks the injustice of the world and, blessed with a highly strung, nervous temperament, some of him drink themselves into early graves or—smoke cigarettes. Others drift into other and perhaps better-paid lines of design—decorators, furniture, etc., and still others drift into heaven only knows what. I have met good, high-class draftsmen herding cattle, stoking engines and collecting bills. Every twenty years or so, when our periodical

hard times come upon us, they scatter, do these clever fellows, to the four corners of the globe, and you can never gather them all back into the fold after the storm.

So, then, the average successful practitioner is, let us call him, an employer of skilled labor, a sort of middleman. Now, for a professional man, is that not a strangely anomalous condition? What would you think of the eminent physician and of the learned legal luminary if they were introduced to you and stayed with you and "jollied" you to the point of your employing them as your professional advisers, only to find, when you were sick, that the former sent around an assistant to diagnose your case, another perhaps verdant youth to practice upon you, and a third adolescent to get the data necessary for the death certificate; or of the legal luminary, should you get into trouble, if he sent you a young assistant to put the facts in the case together ready for a second to prepare a brief for a third youth to plead before the jury in the name of and for the great man who was, meanwhile, chasing other prospective clients and growling at the aforementioned assistants for putting so very much time on your case?

Is it an overdrawn picture? Well, there is your average architect. It may indeed fit some of the preëminently successful ones. I grant you it is not flattering or attractive.

The writer whose article really inspired this perhaps seemingly acrid whatever you may call it, says, naming two prominent societies of architects, that "they have done much to make the position of an architect higher to-day than it ever was." He goes on to say that we are actuated by loftier motives and a nobler spirit than ever before and are striving to place our calling in an unassailable position. As a matter of fact, those societies have done much to bring the architects a bit nearer each other, to impart to them some *esprit de corps* and to make the practice of the profession somewhat more uniform in appearance, at least; but I fear it is too late in the game. Perhaps am I a false prophet, and perhaps am I only a kawing, croaking bird, "shrilly squeaking false alarms"; still, methinks there is the handwriting upon the wall! It seems very plain to me. Heaven grant I may not be a Daniel. I am well content to be only one of Belshazzar's Chaldean interpreters reading it not aright. But to me it spells in big letters that architecture as an independent profession is doomed!

That spirit of commercialism that we have done so little to check, that we are powerless to check, and that so many of us have actually fostered, will be our undoing. Centralization is the order of the day. The carpenter and the stone mason of old have made way for the "general contractor," and the latter, passing through his chrysalid state, has been merged into the colossal "building company," with millions of capital, splendid executive talent and unequalled influence. When a big building is contemplated it is getting to be fashionable, policy and economy to give it to such a company to execute. The architect is a very secondary consideration, and though he gets a fat fee he is a very small fry about that building. The company uses his design—that is a matter of form—and builds it well, but to suit itself, for it deals directly with the owner. The architect is no longer the arbiter and supreme judge of all about that building. There have been cases where such a company actually named the architect, who was then appointed by the client. It is only a step more to his being employed directly by such a company. That has not been done outright simply because it would antagonize all the other architects, and they still have some strength.

But, mark my word, some day, and perhaps one not so very far off, the next step will be boldly taken. The architect will be relegated to the past. Those companies will employ their own *designers*, the architect will be lost in the shuffle. You will state how much money you wish to invest, and those different companies—if they are still uncombined—will tell you how much building they will give you. They will submit designs made by their own employes, and the resulting structures will be just as artistic and well built as those of to-day. There will be as high a premium upon talent and skill as now, perhaps higher, but the possessors thereof will have changed hands; they will bow unto the company as their chief where they salaamed before to the architects. The latter, as middlemen, will pass away, or, at best, will be but memories—battered specimens of a once proud race.

Could anything have been done, or can anything be done now to prevent this impending dissolution? Is it not simply the steady march of evolution, progress? Have not other professions and trades passed away to make place for newer, better means of

accomplishing certain ends? In how much or what is the profession to blame, if blame there be, for bringing about this condition? Go ask the American Institute, wiser men, social doctors; they may answer these and all other queries you may propound. I am but the young assistant come before you to diagnose the case, not to cure the disease nor to prepare the death certificate. I have told you what stage the malady had reached, describing it clearly, without the embroidery of technical terms or seeking to minimize its seriousness.

Go, get it cured, or let it run its course. *Vale!*

LANDSCAPE ARCHITECTURE.*

BY GEORGE F. PENTECOST, OF NEW YORK.

IT gives me great pleasure to be here this evening. Landscape architecture is a subject of increasing interest to the general public, which is in itself gratifying, but that it should be thus indorsed by your League confers upon the subject an interest and value which it could not otherwise have. I therefore desire to acknowledge on behalf of my fellow landscape architects the courtesy you have thus extended to the profession at large.

An odd feature in the present status of landscape architecture is that while it is more or less vaguely accepted as a vocation of recognized standing, it is still a blank from the definitive standpoint. To aver that one is a landscape architect is not sufficient. Such a statement requires an immediate explanation; give it at once, or you may have to decline work ranging from horse-clipping to the designing of a barn. Indeed, so various are the occupations of the men and women now enrolled under variations of this title, that one might be justified in introducing a more inclusive term, such as "landscape-jack-of-all-trades." There are recruits from the world of pen and ink who, not satisfied with landscape architecture as a goal to their aspirations, endeavor to state their ambition by reforming the world of architecture as well. Then, there are certain energetic nurserymen who retain a preserve of "landscape gardeners" in addition to their ordinary stock in trade, the gardeners being supplied gratis, or at cost, with a very large order. We also have the combination of the landscape architect in partnership with the engineer, the stone mason and the landscape gardener. I, myself, have had the pleasure of meeting a brother who called himself a "landscape artist and otherwise," and have seen the business card of still another announcing that he practiced the art of landscape gardening in summer and that of horse-clipping in winter. Is it surprising that the term "landscape architect" requires an explanation, if not a justification?

As an invariable consequence of this medley of practitioners, there is an utter lack of uniformity of conception, both in the mind of the general public and of the majority of the practitioners themselves, as to the legitimate domain and requirements of the landscape architect. The uninitiated public conceives the landscape architect as one who plants trees and shrubs and lays out winding paths, who knows an infinite number of plants by their Latin names, and who condemns all art as "artificial" and sings the praises of "nature" as long as he is allowed. The architect not learned in the history of landscape architecture considers France, with la Notre as its supreme master, the home of this profession. As a matter of fact, England, with Sir Humphry Repton as its first professor, was its birthplace. There it was that the cudgels of independence were swung with the characteristic vigor of the pioneer who believes that his calling is worthy of independent consideration; and there, too, did the heretofore sole and universal style of gardening, namely the architectural or formal style, receive a blow of such severity that it has taken from that date until to-day to recover. On this point, Bloomfield, the author of "The Formal Garden in England," says: "Looking generally at the gardens of England, one can not but admit that the disappearance of formal gardening and the chaos which followed was due to the abuse of the system itself. Formal gardening fell into its dotage, and the vanity of technique overpowered the reserve and sobriety and genuine love of nature which guided the earlier masters. This was the justification, in fact, of the violent change which occurred in the eighteenth century. But the change was thrust upon us by people who not only had no sympathy with the older systems, but by their absence of training were quite unqualified to judge whether that system was good or bad, and the fundamental principle of the relation between the garden and the house was completely lost sight of, though that principle had been accepted as a matter of course throughout all the greatest periods of English art." Here are several points of interest. Bloomfield refers to the chaos which followed the downfall of formal gardening, and rightly interprets the cause as due to the fact that the new style was the work of men who not only had no sympathy with the older systems, but who had no training at all, and but scant culture wherewith to build up a new system. The new system here referred to is the so-called natural style of gardening. It is a system which has until recently been synonymous, I regret to say, with landscape architecture as a distinct profession. It is a system which has been the cause of much contention and misunderstanding between the architect and the landscape architect. It is a system which

*Read before the fourth annual convention of the Architectural League of America, at Toronto, Canada, May 30, 1902.

has many independent merits, but which has been misused, exaggerated and grossly misinterpreted. It is a system which, if properly applied, is productive of infinite beauty, even as nature is, but it is also a system which is well adapted to clothe the ignorance of the untrained mind in the garb of a sentimental love of nature, and this is just what happened. The decline of garden design as a branch of architecture produced the double effect of withdrawing the cultured mind as well as the trained hand of the architect from the art of gardening, and of introducing a medley of untrained and uncultured men who proceeded to denounce the artificialities of formal gardening and to adopt nature as their guide. This general change of taste in garden art was the first evolutionary step in landscape architecture. Its fundamental cause was due to the romantic trend that affected art in all its branches during the early years of the eighteenth century. Garden art ceased to be a question of extending the lines of the house throughout a comparatively small and level enclosure called the garden. The love for natural effects accompanying the romanticism of that date demanded that the "garden" should be extended so as to include the environing landscape. This demand was paramount to a demand for destroying the garden as such, and to replace it with the sweeping contours of undefiled nature. Obviously the problem presented was an entirely distinct one from that which had heretofore absorbed the attention of the architect. It required a knowledge which he did not have, and in truth, a knowledge which at that time no one had. The "ancient received opinions" as to the proper handling of a garden were discarded; they had no elasticity and could not meet the newly evolved requirements that arose. The new style met with a cold reception from the architects. In fact, they, as a class, repudiated it with scorn. Hence, partly from necessity and partly in umbrage, they confined their talents to house architecture pure and simple. Thus the entire field of what is now known as landscape architecture was left for development, on the lines of the new taste, by any and all who saw a gambling chance of enlarging their field of advancement. The consequence was that the old style was either discarded altogether or so exaggerated, both in quality and quantity, that it became a parody upon the original and very beautiful type of the comparatively small garden. But these old gardens had lost their charm, save to the pitying eye of the architect and of a few old-time gentlemen. They were offered as a sacrifice to the infatuated romanticists. Their terrace walls, their flights of moss-covered steps, their vine-clad balustrades were razed and their ruins were buried beneath the beauty-destroying lawns and picturesque ponds of the landscapists. Nature, in fine, was restored to her throne of supremacy, although robbed of her virgin charms, and, as Bloomfield says, chaos reigned supreme. Thus the birth of the so-called natural school of garden design, as well as the present-day profession of landscape architecture.

Until this period, that is, the latter part of the seventeenth century, there was no such vocation as landscape architecture, for the work which is now classed under that head obtained simply as a subordinate branch of architecture, without any particular specification. But from this date on, landscape architecture assumed a proportion which could no longer be ignored, which elicited the attention of the public and produced a heterogeneous class of pseudo-professional men. Men from all ranks of life, worthy and unworthy, cultured and uncultured, poured into the vacuum produced by the withdrawal of the architect and demanded by the enthusiasm for the new style. Even the architect neglected his building as well as his principles for the new art; the head gardener became a man of importance; nurserymen were consulted as to where, rather than as to what, to plant; the painter deserted his canvas and applied his principles of composition to the realities of nature, and even the country gentleman condescended to replace the time-honored "Esquire" for the title of "Professor of Landscape Gardening." Poets sang the praises of the new-born art, while philosophers discoursed irascibly as to the relative merits of the many new styles. Such men as Pope, Addison, Steele, Milton, Sir Uverdale Price, Knight and the poet Mason joined in the enthusiasm for the restoration of nature.

As would be expected, such vigorous enthusiasm as this for the new system itself, as well as the added stimulus of opposing the new style with the old, produced such extravagant and absurd extremes that the whole system of designing grounds became a farce unworthy of attention, were it not for the fact that the farce is still, to a great extent, being enacted by a class of men similar in their astonishing lack of ordinary culture, to say nothing of a trained artistic taste.

Many styles arose, based upon the new conception of natural beauty, each style endorsing the particular limitation of the originator. But in practice they were all alike, and in theory they all agreed in eliminating all appearance of architectural suggestion. The definition of one may serve for all, thus: "The landscape style," Loudon says, "was distinctly marked by the absence of everything having the appearance of a terrace, or of architectural form or lines immediately adjoining the house. The house, in short, arose abruptly from the lawn and the general surface was characterized by bareness and smoothness," and, one is tempted to add, a multitude of shrubs and trees scattered in picturesque confusion about the lawn and interwoven by curvilinear roads and paths, supposed to be suggestive of the mazy meanderings of untotored nature, which abhors a straight line.

When we consider that this new style, which is based upon the absurd proposition that nature, or an approximation of nature, is

under all circumstances more beautiful than art, arose fundamentally from the romantic tendency of the age; and when we understand that the class of men who undertook to champion the theory of the new style were literary amateurs, while the practical execution of the theories were left to the callous hands of truck gardeners and nurserymen and the like, it is not surprising that what art there may be in the natural style was despoiled and that the time-honored formal gardens, the only possible style suitable to accompany the house or other strictly architectural conditions, were annihilated. Every profession must have its beginning and its growth, and if its growth, even two hundred years after its inception, is still tinged by the heterogeneous character of its birth we should not be surprised. Hence, what was true of those pioneer days is to a great extent true of a class of men who are "laying out" many of the estates in this country. They are utterly lacking in the fundamental principles of design. "Back to nature" is their sentimental cry. But of nature they have no cognizance, and of art they are scornful.

To design a formal garden requires at least a certain amount of training in design, but to plant trees and shrubs and to curve and twist roads and paths in and around them requires no knowledge save that possessed by every gardener and nurseryman, and which could be acquired by any partially sane man within six months. Hence, every ambitious gardener, every nurseryman with a superfluous stock of trees and shrubs, and every engineer who imagines himself endowed with artistic possibilities, every gentleman without either fortune or business, and every artist unable to mix his colors to the satisfaction of his possible patrons, adopts landscape architecture as a profession. All alike agree as to the superiority of the natural style and in opposing the architectural or formal style. Thus arose the time-honored opposition between the architect and the landscape architect, and also the difficulty of elevating landscape architecture to that position among the arts which it surely deserves and which it will in time attain. Repton, in 1790, was fully aware of the difficulties that were to be overcome before his art should become a recognized profession. It is curious to note how well the description of the position then existing fits the present-day situation. He describes it thus: "It is the misfortune of every liberal art to find amongst its professors some men of uncouth manners, and since my profession has more frequently been practiced by mere day laborers and persons of no education, it is the more difficult to give it that rank in the polite arts which I conceive it ought to hold." The very nature of landscape architecture lays it open to the difficulties here indicated? It covers a wide field, and it is not surprising that during its rapid growth its various departments have been filled by so varied an assortment of men. Each has filled a niche and each has been necessary to help on its evolution; has tended to define and consolidate the special requirements which must be concentrated in one specially trained class of men. Thus, if we enumerate the numerous fields of labor from which it drew its existence, the general requirements of the landscape architect will be suggested. He has, or rather he is, evolving from the ranks of the arboriculturist, the gardener, the engineer, the architect and the landscape painter. This is indicated, if in no other way, by the numerous titles which have been coined as indicative of the nature of the calling—the landscape artist, the landscape gardener, the landscape engineer and the landscape architect. This series of titles is more than a coincidence; it is indicative of the true inwardness of the profession. It could not stand four-square without combining both the artistic possibilities and the practical necessities of each and all. But, until the last few years, the former of these requirements has been lost sight of, or to be more accurate, has not been attained. The self-entitled landscape architects have represented the practical side of the profession exclusive of the artistic side, which is of paramount value. They, no doubt, are well qualified to grow potatoes, to manage a greenhouse, to manipulate a nursery, to compose a fine landscape on canvas; they represent trained skill in the building of roads, in the art of making trees grow, as well as being fully acquainted with the endless number of plants, the requirements of kitchen and flower garden and the science of drainage and soil fertilization. But such knowledge is of negative importance—has no positive value. It is necessary, but uninteresting from an artistic standpoint. To be master of the technical skill and practical knowledge required to execute in detail and regulate in a practical manner these various requirements is but the basis whereon the landscape architect must build his art; such knowledge as this can be bought, but artistic technique, trained ability to design, the appreciation of proportions, of relations and fitness, a strong grasp of the principles of design and a keen sensibility of the rich inheritance of centuries of artistic experience can not be bought, save by hard study, deep culture and a refined individuality. In landscape architecture, as in architecture, the artist is of more importance than the mechanic. To the architect it is of greater importance that he be able to determine the proportions of an elevation than its constructive details. To know just where to line the driveway, to place the pergola or to plant the tree is of greater value to the landscape architect than to know in detail the practical requirements of doing so. But it is just the lack of this fundamental training in design that has and is clogging the progress of the profession and preventing its attaining its destined goal as one of the fine arts. What should be understood is this: that landscape architecture as a profession is not an accomplished fact; it is in a state of growth—a state wherein the foundations are well

laid but where the view walls are scarcely visible and in no sense pointed up.

We have been considering the beginning and growth of landscape architecture. Let us now so far forget these facts, both historical and present, that we may conceive of the profession as having attained a recognized membership in the sisterhood of the arts. The reason for thus taxing your imagination is that I may discuss, in a general way, the probable or ideal relation of the architect and the landscape architect. It will be recalled that the last of the seventeenth century found the architect supreme over house and grounds, but that the beginning of the eighteenth century found the architect confined to the house, while the grounds fell to the independent charge of the landscape architect. On the one hand, the architect felt that his domain had been usurped by a people unsympathetic in their feelings and incapable, in their lack of training, to govern that field which he had been compelled to evacuate; while, on the other hand, the usurpers no doubt felt, at least to a degree, the justice of this reproach and were therefore stimulated the more to differentiate their value, first by ridiculing the traditional style of designing grounds, and, second, by creating a taste for a new style that in every way diverged from the traditional. Hence, there was little success in harmonizing the two interests which had heretofore been one, for the simple reason that there were two heads for the two distinct departments, working not only independently, but even antagonistically. The extent to which this spirit of antagonism still lingers between the architect and the landscape architect is somewhat uncertain. Opinions will vary, according to experiences. It is certainly less than it was, but more than it ought to be. It is a question which, though easily solved theoretically, must in practice be worked out by the sum of individual experiences. This question has been mooted from the very inception of landscape architecture, and as long as it remains unsettled the related work of the architect and the landscape architect will be inharmonious. There can be no doubt as to the true cause for the continual inhospitality of the architects, for, as a class, they represent a thoroughly trained capacity for design, while the landscape architects, as a class, represent quite the reverse. In other words, it is the friction which must inevitably arise when scientific training is pitted against knowledge which is purely empirical. This difficulty, however, is obviously the result of imperfect growth, and will be solved by the gradual specialization of a trained class of men.

But, let us return to the main question of the relation between the architect and the landscape architect. Repton, the father of landscape architecture, fully realized the importance of this question. "Where buildings are introduced," he says, "art declares herself openly, and should, therefore, be very careful lest she have cause to blush at her interference. It is this circumstance that renders it absolutely necessary for the landscape gardener to have a competent knowledge of architecture. This remark proceeds from the frequent instances I see continually of good houses built without any taste, and attempts to embellish scenery by ornamental buildings that are totally incongruous to their respective situations." The vital importance of selecting the best site, and of fixing the grade if the first-floor level, is seldom appreciated. Upon it depends all consequent arrangement of details, such as the driveway approach, the house garden, forecourt and so on. And as these details in their turn affect and determine all the outlying arrangements of lawn grades, plantations and other units of the whole scheme, the importance of fixing the house grade and site is still more emphasized. Thus, while all questions involving the immediate vicinity of the house should be settled in conference, yet such points as these should tend to subserve the interests of the whole arrangement of the grounds; hence Repton's position is, that while the landscape architect should have no official voice in the actual designing of the house, the style and general arrangement, location and disposition of the house and grounds should be officially determined by the necessities of the landscape architect's general plan, for as he says further, "to my profession belongs chiefly the external part of architecture, or a knowledge of the effect of buildings on the surrounding landscape."

A similar problem, or rather a part of the same problem, points to the logical ultimate of this question. The time was when the architect was also the engineer, the painter, the sculptor and the landscape architect. But now the architect employs the expert engineer to determine upon the necessities of construction, and, to a certain extent, coöperates with the painter and the sculptor, that is, in his building he allots the spaces and positions for the mural decorator and the sculptor and even determines the spaces and positions for the pictures. In other words, the architect confines himself to the general lines and forms and externalities of the building, while the surface and details are filled in by the specialist. Having decided these questions so as to secure a harmonious division of his general scheme, the sculptor and the painter are independent of further limitations save that of their own genius.

Now, there can be no doubt as to the soundness of this position — of the generalship and supervision which the architect has over the building which he designs. It not only provides for a perfect and harmonious whole, but it secures expert skill for each division of the whole. It needs but the extension of this principle, now universally accepted, to recognize the logical answer of the question under discussion.

(To be continued.)

EDUCATION.*

BY LOUIS H. SULLIVAN, CHICAGO.

AFTER the long night, and longer twilight, we envisage a dawn-era: an era in which the minor law of tradition shall yield to the greater law of creation; in which the spirit of repression shall fail to repress.

Man at last is become emancipated, and now is free to think, to feel, to act; free to move toward the goal of the race.

Humanitarianism slowly is dissolving the sway of utilitarianism, and an enlightened unselfishness is on its way to supersede a benighted rapacity. And all this, as a deep-down force in nature awakens to its strength, animating the growth and evolution of democracy.

Under the beneficent sway of this power, the hold of illusion and suppression is passing; the urge of reality is looming in force, extent and penetration, and the individual now is free to become a man, in the highest sense, if so he wills.

There is no estoppel to his imagination.

No limitation to the workings of his mind.

No violence to the dignity of his soul.

The tyranny alike of church and state has been curbed, and true power is now known to reside where forever it must remain — in the people.

Rapidly we are changing from an empirical to a scientific attitude of mind; from an inchoate to an organic trend of thinking. Inevitably we are moving toward the larger significances of life and the larger relations of the individual to that life as embodied in the people.

Truly we are face to face with great things.

The mind of youth should be squarely turned to these phenomena. He should be told, as he regards them, how long and bitterly the race has struggled that he may have freedom.

His mind should be prepared to coöperate in the far-reaching changes now under way, and which will appear to him in majestic simplicity, breadth and clearness when the sun of democracy shall have arisen but a little higher in the firmament of the race, illumining more steadily and deeply than now the mind and will of the individual, the minds and wills of the millions of men; his own mind and his own will.

He should be shown, as a panorama, as a great drama, the broad sweep and flow of the vast life in which he is a unit, an actor; and, that of a vital necessity, fundamental principles must nourish the roots of his lifework and permeate its branches; just as they must animate the work and life of the neighbor — for the general harmony, the good of all.

He should be shown what the reality of history shows, namely, that optimism is an abiding emotion in the heart of the race; an emotion arising from the constant pressure of aspiring democracy seeking its own.

He must be imbued with that pride, that sure quality of honor which are the ethical flower of self-government and the sense of moral responsibility. He must be distinctly taught his responsibility to his fellow men.

He should be taught that a mind empty of ideals is indeed an empty mind, and that there will be demanded of him, if not self-sacrifice, at the least self-restraint, self-denial, and that the highest of ideals is the ideal of democracy.

To this end, history must be illumined for him, and the story of his own day clarified.

To this end he must be inspired first and always with a clear, full conception of what democracy truly means, what it has signified and now signifies for the emancipation of man; what its cost in time, blood and sorrow, that it might emerge from the matrix of humanity; how priceless is it as a heritage — the most priceless of heritages; and how valiantly, how loyally, how jealously should he, as coparcener in its beneficence, cherish its superb integrity.

He, born into democracy, and therefore especially apt to deem it negligible, must be taught with persistent, untiring assiduity, by constant precept, warning and eulogy, that its existence, its perpetuation, its development, is as necessary to the fulness of life as is the physical air he breathes.

The beauty of nature should most lovingly be shown to him, and he be encouraged to venerate and to prize that beauty.

He should be taught that he and the race are inseparably a part of nature and that his strength must come of her bounty.

His mind and heart should be opened to the inspiration of nature, his eye directed to the borderland of that infinite and unknown toward which she leads the thoughtful view, that he may know how great is man and yet how fragile; so will he see life in its momentous balance.

He should be taught that the full span of one's life is but a little time in which to accomplish a worthy purpose; and yet should he be shown what men have done, what man can do.

An art of expression should begin with childhood, and the lucid use of one's mother tongue should be typical of that art.

The sense of reality should be strengthened from the beginning, yet by no means at the cost of those lofty illusions we call patriotism, veneration, love.

He should be taught that high ideals make a people strong.

*Introductory — Three functions of the science of education: (a) The information of knowledge; (b) the discipline of human faculties; (c) the nurture of character and individuality. Read at the fourth annual convention of the Architectural League of America, at Toronto, Canada, May 30, 1902.

That decay comes when ideals wane.

He should be taught that civilization has a higher reach than the goal of material things, that its apex lies in the mind and the heart.

He should be taught common honesty and that there is but one standard of honesty.

He should be taught to despise hypocrisy and cant.

This, in my view, is the fundamental of education because it leads straight to manhood, because it makes for the moral and mental vigor of the race, because it leads toward a constantly expanding sense of humanity, because under its ægis a true art may flourish.

I am not of those who believe in lackadaisical methods. On the contrary, I advocate a vigorous, thorough, exact mental training which shall fit the mind to expand upon and grasp large things and yet properly to perceive in their just relation the significance of small ones—to discriminate accurately as to quantity and quality—and thus to develop individual judgment, capacity and independence.

But at the same time I am of those who believe that gentleness is a greater, surer power than force, and that sympathy is a safer power by far than is intellect. Therefore would I train the individual sympathies as carefully in all their delicate warmth and tenuity as I would develop the mind in alertness, poise and security.

Nor am I of those who despise dreamers. For the world would be at the level of zero were it not for its dreamers—gone and of to-day. He who dreamed of democracy, far back in a world of absolutism, was indeed heroic, and we of to-day awaken to the wonder of his dream.

How deep this dreamer saw into the heart of man!

So would I nurse the dreamer of dreams, for in him nature broods while the race slumbers.

So would I teach the art of dreaming, as I would teach the science of thinking, as I would teach the value of action.

He who knows naught of dreaming can, likewise, never attain the heights of power and possibility in persuading the mind to act.

He who dreams not creates not.

For vapor must arise in the air before the rain can fall.

The greatest man of action is he who is the greatest and a life-long dreamer. For in him the dreamer is fortified against destruction by a far-seeing eye, a virile mind, a strong will, a robust courage.

And so has perished the kindly dreamer—on the cross or in the garret.

A democracy should not let its dreamers perish. They are its life, its guaranty against decay.

Thus would I expand the sympathies of youth.

Thus would I liberate and discipline all the constructive faculties of the mind and encourage true insight, true expression, real individuality.

Thus would I concentrate the powers of will.

Thus would I shape character.

Thus would I make good citizens.

And thus would I lay the foundations for a generation of real architects—real, because true men, and dreamers in action.

EDUCATION.*

BY WILLIAM LAUREL HARRIS, OF NEW YORK.

THE discussion of education is divided into three subjects, or periods of thought:

First is the acquiring of knowledge.

Second is the discipline necessary to gather that information forming the groundwork of education.

Third, and last, we shall consider the effect on the character of the whole course of an artist's studies and the preparation for a life's work.

No doubt the correct way of beginning this discussion is by learned definitions of sounding words, and a marshaling in battle array of all the windy paraphernalia of senior wranglers.

But I, unfortunately, am little skilled in the use of words.

To be understood at all I must refer directly to conditions that exist.

The ordinary course of study is first to saturate the young mind with a multitude of dry facts and unrelated ideas. The dismal result is often evident in architecture. And the same tendency is seen in sculpture and painting, when pupils are made to draw plaster casts for years, without having the slightest inkling of what they are about.

Educators say that this is the correct manner by which to obtain the "Information of Knowledge."

Those of us who have followed the approved curriculum of classic courses know that a large part of the things we learned are of no actual use. Many of us even feel that certain habits of thought are acquired that hinder us in active life. It even seems that professional teachers have produced wonderful systems of cramming, so that in the shortest time possible a prize scholar can be exhibited. The quicker the process the more redounding is the glory of the professor. What becomes of the prize student no one cares. He is thrown out on an unsympathetic world, and is as little able to stand the rude shocks of life as is the Easter

lily or the pumpkin of abnormal growth. He has had dreams of the Acropolis at Athens, the Baths of Caracalla, and all such grand things, and he has dealt more or less with unknown or fabulous quantities. This dreaming is usually called "disciplining the human faculties."

But the prize student knows little of the problems he must face on leaving school.

And thus we have fostered among us a sort of hot-bed art, full of affectation, and having no basis on our national characteristics.

Thus the faults of the professional educator's system have become so evident that many people look with distrust on all information of a theoretical nature.

So there is another form of education, wholly practical, and born of commercial enterprise.

The student (if he can be called such), acquires information through the rough contact of modern competition.

The discipline is that sort of effort necessary to procure and to keep a lucrative position. And if, as often happens, work is hard to find, a low ideal of art is established. An example is one of my comrades of early days, who considered himself fortunate with a "job" that lasted for two years, designing water-closets.

So it is that a theoretical or a wholly practical education is a misfortune.

A more universal form of study should be provided for.

Otherwise our civilization will be incomplete, and foreign prestige will remain, as it now is, a bugaboo of vast and undetermined proportions. National art can not thrive without some kind of national support.

The government of France finds its patronage of the fine arts to be one of its best-paying investments. And then, too, the French government tries to look out in the best way it can for the last and most important factor in education, "the nurture of character and individuality."

The most critical point in a professional career is when a man leaves the school or office in which he has received education.

The single artist has little chance unaided amid the great business operations of our time. It seems impossible for him to live up to his high ideals. In earlier days the Guilds, the Free Masons and the Church were ready to give architects, sculptors and painters that moral support so necessary for the proper development of the artist.

But to-day art can not look to the Free Masons for help. Nor can art expect much support or sympathy from ecclesiastics. Neither will the labor unions consider the fine arts for a single instant. Before such an outlook the isolated artist may well stand dismayed.

But what a single man can not do a group of men can do. The League to-day, with its exhibitions, its meetings and its Committee on Membership, has the machinery necessary to meet the situation.

But we are not alive to the importance of these opportunities.

We can give recognition to new men and we can reconcile the wrangling factions that exist in the art world, and thus become masters of the situation.

We hope that plans will be evolved for a great national art university.

But we must not forget that the League can become an educational factor of vast importance.

The educating of the people at large to a high ethical and artistic standard is a work that we must accomplish. Yet the cultivation of probity in art is of even more vital importance to the members of the profession than is the mere dissemination of knowledge.

Our future success, in fact, depends on the "nurture of character and individuality."

And our success is limited only by our capacity to grasp the huge import of the situation.

With no other institutions than we now have it is possible to direct the artistic future of a continent.

If we do not fulfill this great mission other societies will.

And then, like many other organizations with lost opportunities, we will become a bygone thing and the laughing-stock of younger and more enterprising men.

FOURTH ANNUAL CONVENTION OF THE ARCHITECTURAL LEAGUE OF AMERICA.

THE fourth annual convention of the Architectural League of America was held at Toronto, Canada, on May 29, 30 and 31. Contrary to the ordinary proceeding the convention elected a chairman and secretary for the transaction of its business.

The following roll of delegates and visitors was registered:

Joseph C. Llewellyn, Dwight H. Perkins, C. C. Wilmanns, R. C. McLean (INLAND ARCHITECT), Chicago, Illinois; Ernest J. Russell, Chas. Feil, St. Louis, Missouri; Newton A. Wells, Champaign, Illinois; Frances S. Swales, Cheri A. Mandelbaum, Detroit, Michigan; Frederick G. Todd, Montreal, Canada; Albert E. Skeel, H. Krugeland, Herman Knigelius, Ira O. Hoffman, Cleveland; William Laurel Harris, Julius F. Harder, Frederick S. Lamb, George F. Pentecost, Jr., H. K. Bush-Brown, New York; Emil Lorch, Cambridge, Massachusetts; W. Charles Hays, Philadelphia; Harry D. Bates (*Architectural Review*), Arthur D. Rogers (*The Brick Builder*), Boston, Massachusetts;

*Read before the fourth annual convention of the Architectural League of America, at Toronto, Canada, May 30, 1902.

J. P. Hines, C. A. Barrett, Eden Smith, William Rae, Charles E. Langley, C. H. Acton Bond, J. C. B. Harwood, C. D. Lenox, J. F. Brown, Chas. Langley, S. G. Bickett, Vaux Chadwick, E. R. Ralph, Henry Sproatt, S. F. Smith, Toronto, Canada.

The convention, which was held in the art galleries of the Ontario Society of Artists, was well taken care of by the Architectural Eighteen Club of Toronto. The entertainment provided by its members was varied and enjoyable, and as this is the first architectural convention of an international character that has taken place in the history of American architectural societies, the reception of the delegates from the United States is noteworthy.

The galleries were used not only as a place of meeting, but the walls of two rooms were hung with a very extensive and varied collection of photographs and drawings, which were collected for the occasion.

The first session was opened and the delegates from the thirteen clubs represented by the League welcomed by Mr. Eden Smith, president of the Toronto Eighteen Club, and Joseph C. Llewellyn, of Chicago, president of the League, replied.

E. J. Russell, of St. Louis, was elected chairman, and H. Skeel, of Cleveland, was appointed secretary.

The morning session was occupied with the reports from officers and standing committees, the latter including reports from the Committee on Publicity and Promotion, Lawrence V. Boyd, of Philadelphia, chairman; report on Exhibition Circuit, by W. T. Kleinpell, of Chicago, chairman; report on Code of Ethics, by Julius F. Harder, of New York; report on Foreign Exhibit; report on Current Club Work, by Ernest J. Russell, of St. Louis; report of Committee on Education, by Julius F. Harder, of New York.

In the afternoon the subject of education was discussed, and occupied the entire session.

In the evening session the report of the Municipal Improvement Committee was read and illustrated by lantern slides, by H. K. Bush-Brown, chairman of the committee.

Chairman Russell called the meeting to order at 10 A.M. on the second day of the convention, and called for the report of the Auditing Committee, which was to the effect that the treasurer's accounts were found correct.

On motion it was decided to add an auxiliary committee of five to the Committee on Publicity.

A motion was offered by Mr. Harris, and passed, looking toward the increase of the membership of the League, its action to be reported at the next annual meeting of the League.

Mr. Llewellyn introduced a resolution in behalf of the Committee on Civic Improvement, proposing that a lecture, illustrated by lantern slides, to accompany the circuit exhibitions, be arranged for, and that Mr. Bush-Brown be requested to prepare the same. The resolution was explained by Mr. Bush-Brown and adopted.

A paper by Mr. George F. Pentecost, of New York, on "Landscape Architecture," was read, which was received with a great deal of attention, and a special vote of thanks was offered Mr. Pentecost at its conclusion.

Mr. Harris read a paper by C. M. Robinson, of Rochester, New York, on "Civic Art; or Evolution, not Revolution," which concluded the morning session.

The evening session was occupied by the discussion of the subject of education. As an introductory, Chairman Russell read a paper on "The Formation of Knowledge," by Louis H. Sullivan, of Chicago (printed on page 41), followed by a paper on "The Discipline of Human Faculties," by William Laurel Harris, of New York (printed on page 42). These papers were followed by Herbert R. Briggs, of Cleveland, on, "Is an American Art University a Desirable or Necessary Institution?" "Should the National Government Have Connection With and Jurisdiction Over a National Art University?" by Percy Ash, of Washington; "Should a National University be One Principally for the Arts and Crafts and Secondarily for the Fine Arts?" by Prof. Newton A. Wells, of the University of Illinois, and John W. Case, of Detroit.

At the conclusion of these papers the session adjourned.

The first session of the concluding day of the convention was largely devoted to the reading of the concluding papers in the educational program. Joseph C. Llewellyn read a paper by George B. Page, of Philadelphia, on "Can a System of Self-education by Means of Club Association be Permanently Established?" followed by Emil Lorch, of Cambridge, Massachusetts, on "Is Such a System Demanded by Present Conditions?" Mr. Lorch reviewed the different phases of school work, including "plan and scope" connection between clubs and educational institutions, and other problems relating to a scholastic system.

Frederick J. Lamb, of New York, made an extemporaneous address upon the influence of true and false art, which was one of the notable addresses of the convention, and was enthusiastically received.

Dwight Heald Perkins, of Chicago, read an elaborately prepared paper on "Architecture and Citizenship," which was well received, and after a vote of thanks had been offered Mr. Perkins the meeting adjourned.

Chairman Russell called the last session of the convention to order at 2:30 and proceeded to appoint standing committees as follows:

Publicity and Promotion—Frederick J. Lamb, Joseph C. Llewellyn and E. J. Russell.

Auxiliary Promotion—F. M. Day, Charles Blackall, D. H. Perkins, Hewlett, Albert E. Skeel.

Code of Ethics and Competition—J. F. Harder, W. F. Steinberger, Shean.

Exhibition Circuit—W. L. Harris, chairman, W. F. Kleinpell (one to be appointed by president).

Committee Current Club Work—E. J. Russell, Hays, J. P. Hines.

Education—Emil Lorch, Percy Ash, J. W. Case (Detroit).

On Foreign Exhibits—Chairman (of Exhibition Circuit), J. H. Philips (Chicago), and one member to be appointed from Philadelphia or New York.

In the election of president, the two candidates, Mr. Russell, of St. Louis, and Mr. Lamb, of New York, received an equal number of votes. Mr. Russell asked that he be allowed to withdraw, and that the election of Mr. Lamb be made unanimous, which was done in the election of Emil Lamb, of New York.

The convention adjourned to meet at St. Louis, October 12 and 13, 1903.

A vote of thanks was passed unanimously to Messrs. Russell and Skeel and to the Toronto Eighteen Club, and the convention adjourned.

PAINTS IN ARCHITECTURE.

HOW many architects have ever been struck by this fact: The painter's profit lies in using perishable paint, while that of the architect lies in durable paint? I have known an old painter to say: "I don't want paint that lasts too long; there is no profit in it for me." Probably this attitude is exceptional, but at the same time the fact that paints based on zinc white are more durable than other paints may explain, to some extent, the conservative attitude of painters in regard to the question; they would not use or recommend paint that they believe to be inferior, but they are not over curious regarding later innovations, which may be superior.

At any rate, when all the rest of the paint world are agreed that combinations based on zinc white are more economical and more satisfactory in every way than the old "straight lead and oil," the painters, as a class, still cling to the old (and profitable) tradition.

The architect's interest lies, however, in subserving the best interests of his clients. The better paint looks, the longer it lasts, the less it costs, and the longer it preserves its freshness, the better it sustains his reputation. The painter will get the job of repainting, but when the house is completed the architect's direct interest in it ceases. The appearance and wear of the building, however, tell for or against him. In this final summing up the paint is the most conspicuous factor. It is seen of all the world, and is an advertisement or the reverse, according as it retains or loses its beauty.

In a question of such importance it is perhaps not always the part of wisdom to leave the selection of material to "the judgment of the painter."

CHARLES JOURDAIN.

A NEW BRIQUETTE FUEL.

EVER since the discovery of the apparently inexhaustible supplies of fuel oil at Beaumont, Texas, invention looking to the solidification of petroleum in the form of briquettes for steam-producing and domestic purposes has been greatly stimulated. Up to the present time, French inventors have come as close as any to its solution, and notwithstanding the experimental nature of the briquettes made in this country, recent contributors to the literature on the subject from United States Consul Bruno at St. Etienne, France, would indicate that the most friendly interest in the subject has been taken by the French Government, who are paying as much as \$2.37 per kilogram for petroleum briquettes with which to run their torpedo boat destroyers and other smaller craft.

The Standard Petroleum Briquette Company has secured the product of three of the largest oil wells at Beaumont, and an extensive frontage on the Neches river, and will employ its own steamers to deliver its product in all parts of the world.

A Chicago company, headed by T. L. James, one of the inventors who have undertaken to manufacture this fuel, is now erecting at Spindle Top, near Beaumont, Texas, a factory with an output of two hundred and fifty tons daily, at which petroleum briquettes will be made so cheaply that they will be able to compete with the French manufacturers in the home market. The crude oil is solidified in forty minutes in five-ton lots, passing through an ordinary brick machine and manufactured into briquettes at a rate of four hundred per minute. The thermal units of this fuel is so high that an immense saving in bunker space can be made in its use in steamship and naval vessels. The fuel burns with a steadily sustained heat until all the hydrocarbons are consumed, in other words, leaving practically no ashes.

A San Francisco expert, who has tested the steam-producing quality of the briquette, said that had the Oregon been equipped with this fuel, she could have made the trip from Scott's yards to Santiago without the loss of time for coaling at Valparaiso, and that with this fuel it would have been unnecessary for any of the Santiago fleet to have left the cordon of vessels there for the purpose of recoaling.

The exhaustive experiments of Admiral Melville with fuel oil in vessels are well known, and experts generally agree in con-

demning his theory as unsound and point to the danger of the storage of large quantities of inflammable petroleum on board ship, while with this Chicago invention the reverse is secured, both in steam-producing quality and in absolute safety in carriage.

REST FOR AN ARCHITECT.



A GLIMPSE OF HARBOR POINT.

AN architect's vacation is usually a more hastily executed plan than most of those he makes in the regular line of his profession, but when he sees that a few days can be taken and has felt for a long time that it was a necessity, he often defeats its object by going to another locality, it is true, but where the conditions are similar to those he has left, and his mind does not receive the rest or his body the climatic change that is the purpose of his going away. There is no trip that can be taken that will so fully meet all the requirements, including cost, as that of a journey by water and a stay where he can be surrounded by natural scenery. It is difficult to describe the vast amount of rest and recreation which can be secured in a brief week or two on a perfectly appointed steamer. Take, for instance, the boats of the Northern Michigan Transportation Company that are particularly adapted both in management, plan and route to the necessities of the case. They leave Chicago four times a week for the northern end of Lake Michigan, and there connect with other steamers



A MOONLIGHT NIGHT ON THE S. S. ILLINOIS.

that will carry the traveler to the farthest port on the great chain of lakes that marks the boundary of the United States and Canada. The vacation begins when the steamer casts off her lines and leaves the dock, and whether in the midst of the lake or in the harbor of any of the numerous ports of call, the surroundings are comfortable and interesting and, what is more to the point, there are no buildings to criticise or to admire or to induce the mind to return to the work upon which it has been too closely engaged. Where one has habitually traveled by train, there is a source of satisfaction beyond that which is gastronomic in realizing that those three most satisfactory sojourns at the table each day are included in the passage tickets, and the elegance, speed and manifest safety of these steamers of this line leave nothing to be desired but the indefinite continuance of the trip.

Here the air is always cool and invigorating and at the journey's end the wisdom of choosing a lake trip above any other form of recreation is one of the settled convictions of every one who has ever watched the dusty, heated city fade into the distance, enveloped in its own fog of smoke and dust, and watched the sun set and the glimmering, moon-touched water from the deck of a lake steamer.

MOSAICS.

THE successful competitors in the competition for the Agricultural building at Washington were Lord & Hewlitt, of New York. There were ten competitors. The competition was adjudged by a committee consisting of D. H. Burnham and C. F. McKim, architects; Augustus St. Gaudens, sculptor; Frederic Low Olmstead, landscape architect, and J. Knox Taylor, supervising architect. The building is designed for the accommodation of the Secretary of Agriculture and his staff, and the general work of the Agricultural Department.

THE "skyscraper" was the principal topic at the recent meeting of the Engineers' Society of western Pennsylvania, held at Pittsburg, at which Charles Worthington read an interesting paper upon the steel framework of high buildings. P. B. Wight, of Chicago, read a paper upon fireproofing of high buildings, in which he gave a history of the modern "skyscraper." In addition to his paper Mr. Wight answered many questions relative to the corrosion of iron, saying that the talk of the steel building becoming unsafe through corrosion was absurd.

EMPLOYERS and members of trades unions alike in England, are surprised at the rapid work in the erection of the works of the Westinghouse Electric Company at Manchester. The buildings cost something like \$7,000,000 and were erected in less than a year, with British workmen under American supervision. The work was superintended by J. C. Stewart, of St. Louis. Daily reports were received by him from seventy-five foremen, and instead of 450 brick, which is said to be an average trades-union day's work, each man laid an average of 1,800. It was a question of whether the union rule would give way to American "push," and "push" won.

ABSOLUTE safety through the use of the bascule or Shurzer Rolling Lift Bridge, as evidenced by the accident at Chicago on the Metropolitan Elevated Railway at Jackson and Van Buren street bridge crossing, casually mentioned in the daily press, might under the usual circumstances have been a terrible disaster. Had there been at this point one of the old-fashioned swing or draw bridges, nothing could have saved the train from plunging into the river, with hundreds of people crushed and drowned. The height of the fall would have been fatal, and the damage caused a total cessation of traffic on bridge and river for a long time. While the results under the present adequate protection, a bascule or rolling lift bridge, only a slight jar was felt by the passengers, and a few moments' delay of the train. This form of bridge is the result of the successful solution of one of the greatest engineering problems that the city has had to face in crossing the river. Two old swing bridges blocked the way of the Metropolitan Elevated Railway at this point. It being impossible to use that form of bridge, the late William Shurzer, a prominent civil engineer, was called in to solve the problem. The present form of bridge, now called the Shurzer Rolling Lift Bridge, which was constructed from Mr. Shurzer's designs, has become under the Shurzer Company of Chicago the popular form of drawbridge for all great railroads, with their numerous tracks and tremendous weight of traffic, as well as those of smaller and less important lines. There are a number now in operation and in course of construction in Chicago, throughout this country and abroad.

OUR ILLUSTRATIONS.

- Residence at Salt Lake City, Utah. Fred A. Hale, architect.
- Residence at San Francisco, California. Fred H. Myers, architect.
- Residence at Los Angeles, California. Hunt & Eager, architects.
- Raymond Hotel, Pasadena, California. Hunt & Eager, architects.
- Residence at Los Angeles, California. Dennis & Farwell, architects.
- A Study for an Institute of Fine Arts. Design by V. Truxler, architect, Chicago.
- Station for Delaware, Lackawanna & Western Railway, Binghamton, New York.
- First National Bank, Moline, Illinois. Harry W. Jones, architect, Minneapolis, Minnesota.
- Church, Chicago. J. E. O. Pridmore, architect. An exterior and an interior view are shown.
- Photogravure Plate: House, Chicago. Pond & Pond, architects.

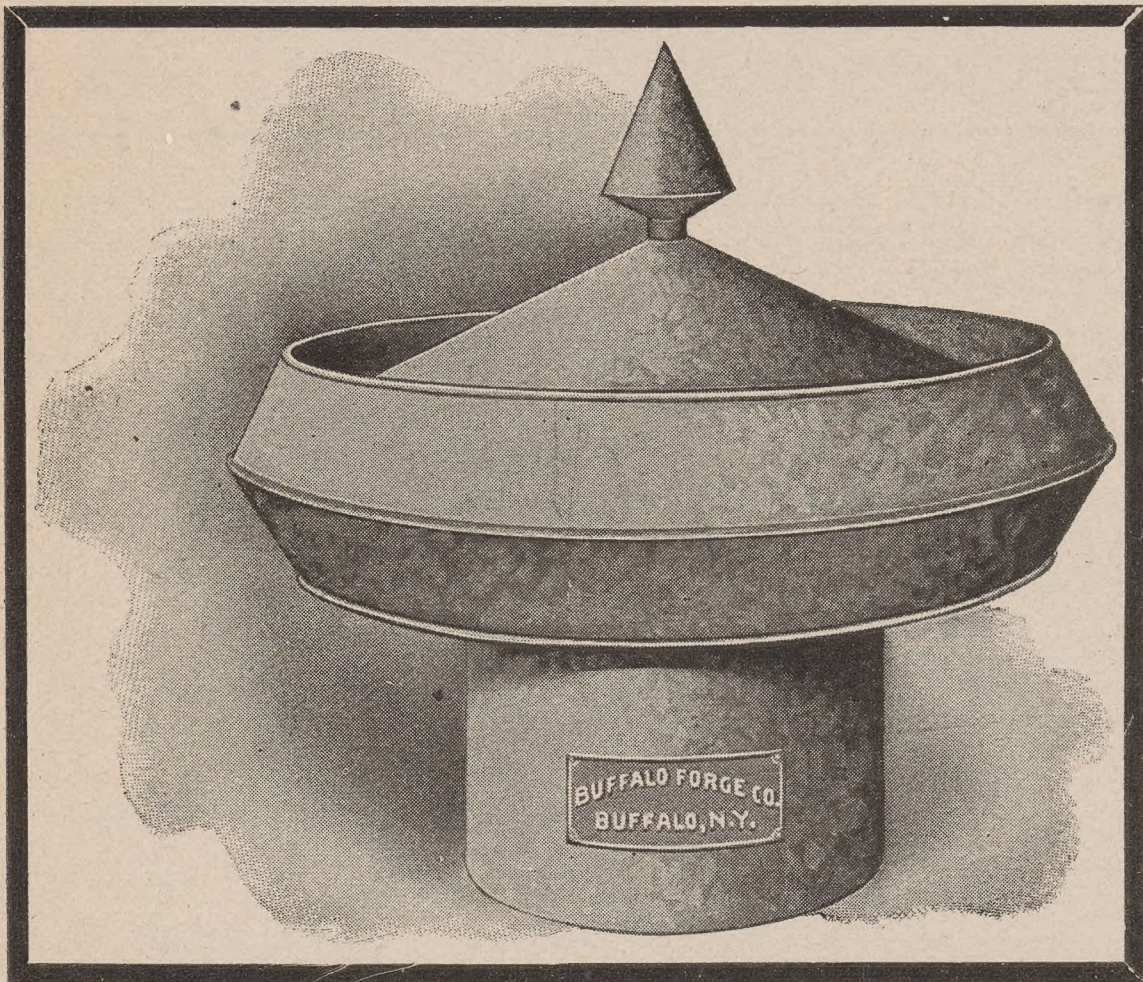
PHOTOGRAVURE PLATES.

Issued only with the Photogravure Edition.

- House, Buena Park, Chicago. Pond & Pond, architects.
- Apartment building, Milwaukee, Wisconsin. Ferry & Clas, architects.
- Apartment building, Sheridan Park, Chicago. James Gamble Rogers, architect.
- Buildings for Downer College, Milwaukee, Wisconsin. Alexander C. Eschweiler, architect. Four views are shown.

PERSONAL.

THE J. Riley Gordon Company, architects, of Dallas, Texas, has removed its headquarters from that city to offices in the University building, New York city.



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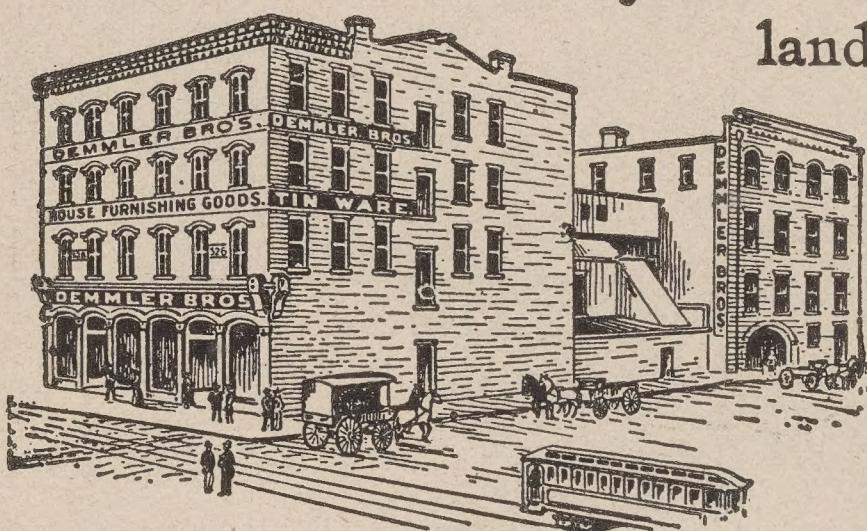
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THE INLAND ARCHITECT AND NEWS RECORD

Vol. XXXIX.

ADVERTISERS' TRADE SUPPLEMENT.

No. 5

ELECTRIC POWER.

Two rotary converters of 300 K. W. each have recently been purchased by the Manchester (N. H.) Traction, Light & Power Company from the Westinghouse Electric & Manufacturing Company. They will be located at Hookset, New Hampshire, and will deliver power for the operation of the Concord and Manchester branch of the Boston & Maine Railroad, this road having entered into a contract for power with the Manchester Traction, Light & Power Company. The machines are to be supplied with three-phase alternating current and will deliver direct-current at 600 volts.

The Westinghouse Company has also recently sold two rotary converters to the South Covington & Cincinnati Street Railway Company, one being of 200 K. W. capacity and the other of 400 K. W. capacity.

The first cement plant in Canada to be operated by electric power is that of the National Portland Cement Company, at Durham, Ontario. All of the cement-making machinery in this plant will be driven by induction motors supplied with current by two Westinghouse 450 K. W., three-phase alternators. These machines are of

the engine type with revolving fields, and run at 125 R. P. M., 3,000 alternations and 600 volts. Two exciting units are provided, one consisting of a 62½ K. W., 125-volt, engine-type D. C. generator, direct connected to an automatic engine, and the other of a 56½ K. W. machine coupled to an induction motor. The output of the exciters will be used not only for exciting the fields of the A. C. generators, but also for arc and incandescent lighting throughout the works and grounds. The Westinghouse Company also furnishes the 8-panel switchboard and instruments.

TRADE NOTE.

ONE New York Central Railroad advertisement has had a circulation of eleven million copies, and it has penetrated every country on earth.

WHEN the good people of Hamelin were tormented by a very plague of rats, they made and broke an agreement with the famous pied piper. All the world knows the result. Hamelin might have kept its children and its reputation for honest dealing if every house had been supplied with one of the rat traps made by the Smith &

Egge Manufacturing Company, of Bridgeport, Connecticut. This trap is well named "Yankee," because, while very simple, it is at the same time so ingenious as to impose upon the wariest old gray rat that ever nibbled cheese. The company also manufactures the "Wizard" mouse trap. These traps are strongly made of the best galvanized wire.

THE Sauquoit Silk Manufacturing Company has recently placed an order with the Buffalo Forge Company, of Buffalo, New York, for eight of their high-speed automatic engines, which will be used in their works at Scranton, Philadelphia and Bethlehem, Pennsylvania, four at the first and two at each of the latter plants. These will be of the enclosed type, running in oil, which thus presents no difficulties in the way of damage to goods by throwing oil on them. The engines will be located at various points throughout the factories and used principally as auxiliaries in the case of breakdowns to the main engines, so that the separate sections of the mills may be kept running without loss of time. The decreased efficiency of small, high-speed engines over a central unit will be made up for in this case by the avoidance of belting.

SITUATION WANTED.

A quiet young lady who has finished a technical course in mechanical drawing and is experienced in designing, would like to work in an architect's office in Chicago.

Address "A. B.,"

Office of Inland Architect.

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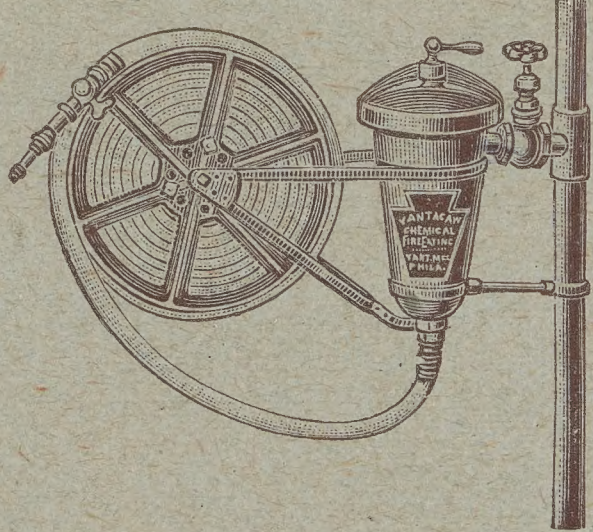
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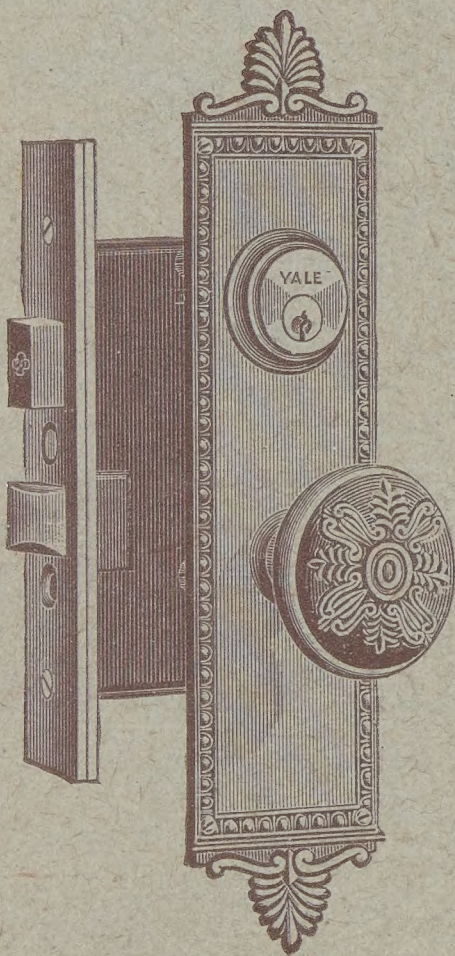
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